

POLYAKOV, Il'ya Yakovlevich, prof., doktor sel'khoz. nauk; REUTSKAYA,
O.Ye., red.; BARANOVA, L.G., tekhn. red.

[Harmful rodents and their control] Vrednye gryzuny i bor'ba s
nimi. Leningrad, Izd-vo sel'khoz. lit-ry, zhurnalov i plakatov,
1961. 261 p. (MIRA 15:1)

(Rodent control)

POLYAKOV, I. Ya.,

"Morpho-physiological variability of noxious rodents and prognosis of their abundance in Russia."

report presented at the Intl. Symposium on Methods of Theriological Investigation. Brno, Czech.,
4Sept. 1960

26 Aug -

POLYAKOV, I.Ya., doktor sel'skokhozyaystvennykh nauk

Forecasting the distribution of main grain pests in 1961.
Zemledelie 23 no.3:61-64 Mr '61.

(MIRA 14:3)

1. Vsesoyuznyy institut zashchity rasteniy.
(Grain--Diseases and pests)

POLYAKOV, I.Ya., doktor sel'skokhozyaystvennykh nauk

Biological principles of controlling rodent pests of field
crops and pastures. Trudy VIZR no.12:3-17 '58.
(MIRA 13:5)

(Rodent control)

BULYGINSKAYS, M.A., kand.biologicheskikh nauk; POLYAKOV, I.Ya., doktor
sel'skokhozyaystvennykh nauk

Propagation of the greater gerbil (*Rhombomys opimus* Lich.)
in the desert areas of southern Uzbekistan. Trudy VIZR
no.12:18-33 '58. (MIRA 13:5)
(Uzbekistan--Gerbils)

POLYAKOV, I.Ya., doktor sel'skokhozyaystvennykh nauk, prof.

Current status of the problem of predicting pests and
diseases among farm animals. Trudy VIZR no.12:203-219
'58. (MIRA 13:5)

(Agricultural pests) (Veterinary hygiene)

POLYAKOV, I. Ya., prof., doktor sel'skokhozyaystvennykh nauk

Predicting the distribution of main grain pests for 1960.
Zemledelie 8 no.2:70-73 F '60. (MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity
rasteniy.
(Grain--Diseases and pests)

POLYAKOV, I.Ya.; KUBANTSEV, B.S.; MEYER, M.N.; SKHOLL', Ye.D.

Some features of the morphological and ecological variability
of the lesser suslik (*Citellus pygmaeus*) in different parts of
its range. Trudy VIZR no.12:34-50 '58. (MIRA 13:5)
(Susliks)

POLYAKOV, I.Ya.

International conference on harmful rodents. Zool. zhur. 38 no.11:
1766-1768 N '59 (MIRA 13:3)
(Rodent control--Congresses)

POLYAKOV, I.Ya., prof., doktor selskokhozyaystvennykh nauk

Forecast of the occurrence of the main grain pest.
Zemledelie 7 no.2:90-92 F '59. (MIRA 12:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity
rasteniy.

(Grain—Diseases and pests)

POLYAKOV, I.Ya., prof., doktor sel'skokhozyaystvennykh nauk

Plant protection service. Nauka i zhizn' 25 no.8:26-29 Ag '58.
(MIRA 11:9)

(Plants, Protection of)

POLYAKOV, I.Ye., zasluzhennyy vrach RSFSR

I.P. Pavlov's theories on types of nervous activity. Med.sestra
17 no.6:3-6 Je '58 (MIRA 11:6)

1. Poliklinika No.5 imeni Dzerzhinskogo, Moskva.
(TEMPERAMENT)
(NERVOUS SYSTEM)

POLYAKOV, I. Ye.

Care of patients with cranial and cerebral injuries. Med. sestra,
Moskva no. 12:9-12 Dec. 1951. (CLML 21:3)

1. Moscow.

POLYAKOV, I.Ye (Moskva)

Ivan Mikhailovich Sechenov. Med.sestra no.6:23-27 Je '55.
(BIOGRAPHIES. (MLRA 8:?)
Sechenov, Ivan Mikhailovich)

POLYAKOV, I. YE.

Spinal cord - Wounds and Injuries

Spinal cord injuries, Med. sestra, no. 1, 1952

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

POLYAKOV, I.Ye.

Problem of the correct polyclinic evaluation of brain symptoms
masking acute myocardial infarct. Zhur. nerv. i psikh. 60
no. 12:1607-1609 '60. (MIRA 14:4)

1. Poliklinika imeni Dzerzhinskogo (glavnyy vrach I.G. Karakozov)
Ministerstva zdravookhraneniya RSFSR, Moskva.
(HEART---INFARCTION) (BRAIN---DISEASES)

POLYAKOV, I.Ye. (Moskva)

Rheumatic lesions of the nervous system. Med.sestra 21 no.11:
13-16 N '62. (MIRA 16:3)
(NERVOUS SYSTEM—DISEASES) (RHEUMATIC FEVER)

POLYAKOV, I.Ye. zasluzhennyy vrach RSFSR

Foundation and development of the F.E.Dzerzhinskii Polyclinic;
on the polyclinic's 40th anniversary. Sbor.nauch.-prak.rab.
Poliklin.im.F.E.Dzerzh. no.2:234-238 '61. (MIRA 16:4)
(MOSCOW—CLINICS)

POLYAKOV, I.Ye., zasluzhennyy vrach RSFSR

Syringomyelia. Med. sestra 20 no.8:26-30 Ag '61. (MIRA 14:10)

1. Iz polikliniki imeni Dzerzhinskogo, Moskva.
(SYRINGOMYELIA)

POLYAKOV, I.Ye., vrach, (Moskva)

Neurasthenia and its prevention. Med. sestra no.1:6-10 Ja '55.
(MIRA 8:3)

(NEURASTHENIA, prevention and control)

FOIYAKOV, I. Yo.

Division

General indications of divisibility. Mat. v shkole no. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 195⁸, Uncl.
2

POLYAKOV, J. M.

"Polyakov, J. M., Textbook of Darwinism." (p. 554) Rev. by L. A. Andrew

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XIV, No. 3, 1941

1ST AND 2ND CODES																										3RD AND 4TH CODES																									
PROCESSING AND PROPERTIES INDEX																																																			
Lead acid cells, their construction and installation. K. Polyakov. <i>Khimsvet</i> 5, 2152-60, 2222-8(1933).—Various designs of lead cooling systems used in U. S. S. R. and other countries in the production and regeneration of H_2SO_4 and HNO_3 are discussed in detail. Chas. Blanc																																																			
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		How to start a sulfuric acid tower system. K. A. Iudjakov and A. A. Vasil'ev. Khimstroi 5, 2400-501 (1937). 18																																																																													
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18 EX Tower systems without lead. K. Polyakov and A. Vasil'ev. J. Chem. Ind. (U. S. S. R.) 1964-8(1967). The possibility of replacing Pb app. by Fe is discussed. H. M. Leicester																																																																																																			
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13

C.A.

Natural acidproof materials and their application in chemical industry. K. A. Polyakov. *Korrosiya i Borba* i No 5, No. 3-4, 95-106 (1959).—A report on a number acidproof minerals, and their properties and the description of app. and procedures involving their application as protective linings, as materials for construction of apparatus, and as ingredients of acidproof cements or plastics. C. S. Shapiro

ASTM-S.A. METALLURGICAL LITERATURE CLASSIFICATION

14 13

Nonmetallic acid-resisting materials. K. A. Polyakov.
J. Chem. Ind. (U. S. S. R.) 10, No. 8, 2032 (1930).
H. M. Leicester

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PROCESS AND PROPERTIES INDEX																									
1ST AND 2ND ORDERS													3RD AND 4TH ORDERS												
CA 13 Nonmetallic acid-resisting materials. II. Organic acid-resisting materials. K. A. Polyakov. <i>J. Chem. Ind.</i> (U. S. S. R.) 17, No. 3, 37-42(1940); <i>Ch. C. A.</i> 34, 10971. H. M. Leicester																									
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																									
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PROCESSES AND PROPERTIES INDEX																																																			
ca																										An estimation of acid-resisting silicate cements as a protection of apparatus from corrosion. K. A. Polyakov. <i>J. Chem. Ind. (U. S. S. R.)</i> 17, No. 8, 30-44 (1960); cf. <i>C. A. 54</i>, 6381i. — Crit. review of the Russian literature with 9 references. H. M. Leicester																									
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Method for measuring accurately the temperature of a metal surface in studies of heat transfer to boiling liquids. K. A. Polyakov and L. N. Meyman (Moscow Institute of Chem. Equipment Building). *Khim. Prom.* 1949, No. 11, 18-20. For measuring temp. in hot aggressive liquids a steel tube (10-15 mm. diam.) was used, on the surface of which were cut grooves (1.0-1.2 mm. wide and 0.8 mm. deep). The sensitive ends of thermocouples were covered with a layer of a suitable varnish above the silk wrapper and were placed in the grooves. The grooves were filled with Sn; the tube now carrying the desired no. of thermocouples placed at various points was cleaned and electrolytically coated with a layer of the metal the heat transfer of which was to be studied. M. Hosh

SUBJECTS AND PROPERTIES																									
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31 Phenol-formaldehyde compositions which polymerize at low temperatures. K. A. Polyakov, A. A. Streptikheev, and Yu. A. Streptikheev. <i>Khimiya</i> 1947, No. 3, 19-20. The purpose of this investigation was to find a strongly adhesive, chemically resistant cement which hardens at low temps. to be used in lining of chem. app. To this end, a mixt. of phenol 1 kg., 24% CH₂O 1.251, and 30% NaOH soln. 7.5 ml. was gently boiled for approx. 1.5 hrs. until a slight turbidity appeared. The hot mixt. was neutralized (phenolphthalein) with HCl while it was stirred strongly, and then 2 l. of cold H₂O was added. The mixt. sepd. into layers, the aq. layer was decanted, and the residue was washed by shaking with H₂O several times. The yield was 1.4 kg. of resin per 1 kg. of phenol. For use this product is compounded with sand (SiO₂ 98.4, Al₂O₃ 0.6%, and CaO trace) 90 and toluenesulfonyl chloride 10 parts by wt. The sand and the toluenesulfonyl chloride are intimately mixed, first at room temp., then at 65-75°, and finally compounded with the condensation product taken in a ratio of resin:filler 1:2. In testing this cement (PS), it was compared to "Asplit normal." Its chem. resistance tested in HCl (1.18) and H₂SO₄ (40%) was practically that of Asplit normal. Its bonding strength of wood-to-wood and cement-to-cement was greater than that of Asplit normal; it was somewhat greater in bonding cement-to-ceramic-to-cement and somewhat lower in bonding non-to-non than Asplit normal. This compn. hardened at 120° in 6-7, at 100° in 8-11, at 80° in 45-90 min., and at 15-18° in 48 hrs. Another compn. was obtained by boiling a mixt. of phenol 9, 25% CH₂O 5 g., and HCl (1.18) 0.5 ml. for 3-5 min. To the boiling mixt. was added BzCl 0.5 g. and the boiling continued for 3-4 hrs.																									
ASB-354 METALLURGICAL LITERATURE CLASSIFICATION																									

STREPIKHEYEV, A.A., kandidat tekhnicheskikh nauk; POLYAKOV, K.A., professor
STREPIKHEYEV, Yu, A., kandidat khimicheskikh nauk

Phenol-aldehyde compositions with low-temperature polymerization.
Khim.prom.no.3:83-84 Mr'47. (MIRA 8:12)

1. Nauchno-issledovatel'skiy institut khimicheskogo mashinostro-
yeniya.

(Plastics)

POLYAKOV, KONSTANTIN ANDREEVICH.

Nemetallicheskie khimicheski stoikiye materialy. Moskva, Gos. nauch.-tekhn. izd-vo khim. lit-ry, 1947. 266 p. illus.

Bibliography: p. 266-267.

Nonmetallic chemically stable materials.

DLC: TA407.P6

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

POLYAKOV, KONSTANTIN ANDREEVICH, ed.

Zashchita metallov ot korrozii. Sbornik statei. Moskva, Mashgiz, 1950. 106 p.

Protection of metals against corrosion. Collection of articles.

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

1. POLYAKOV, K. A.
2. USSR (600)
4. Technology
7. Corrosion and its prevention; collection of articles, Moskva, Mashgiz, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

POLIAKOV, K.A.

Korroziia i bor'ba s nei. Sbornik
statei (Corrosion and its prevention; collection of
articles). Moskva, Mashgiz, 1952. 166 p.

SO: Monthly List of Russian Accessions, Vol. 6, No. 1, April 1953

POLYAKOV, Konstantin Andreyevich.

[Non-metallic chemically stable substances] Nemetallicheskie khimicheski
stoikiye materialy. 2. izd., perer. Moskva, Gos.nauchno-tekhn.izd-vo khim.
lit-ry. 1952. 422 p. (MLRA 6:7)

(Chemistry, Technical)

POLIAKOV, K. A.

Nemetallicheskie khimicheski stoikiye materialy [Non-metallic chemically stable materials].
2-e izd. Moskva, Goskhimizdat, 1952.

SO: Monthly List of Russian Accessions, Vol 6 No 6 September 1953

GAVRILOV, A.N., doktor tekhnicheskikh nauk, redaktor; POLIAKOV, K.A., professor, retsenzent; ZAVADSKIY, B.F., inzhener, retsenzent; RUSNVICH, I.M., inzhener, redaktor; MODEL', B.I., tekhnicheskii redaktor; TIKHONOV, A.Ya., tekhnicheskii redaktor

[Progressive practice in instrument making] Progressivnaya tekhnologiya priborostroeniya. Moskva, Gos. nauchno tekhn. izd-vo mashinostroitel. i sudostroitel. lit-ry. No.2. [Perfecting instrument production techniques] Sovershenstvovanie tekhnologii proizvodstva priborov. Pod red. A.N.Gavrilova. 1953. 337 p. (MLRA 8:3)

1. Vsesoyuznoye nauchnoye inzhenerno-tekhnicheskoye obshchestvo mashinostroiteley i priborostroiteley.
(Instruments)

POLYAKOV, K. A.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 490 - I

BOOK

Call No.: AF637605

Authors: POLYAKOV, K. A., SLOMYANSKAYA, F. B. and POLYAKOVA, K. K.

Full Title: CORROSION AND CHEMICALLY STABLE MATERIALS

Transliterated Title: Korroziya i khimicheski stoykiye materialy

PUBLISHING DATA

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House of Chemical Literature (Goskhimizdat)

Date: 1953

No. pp.: 360

No. of copies: 8.000

Editorial Staff: None

PURPOSE: Approved by the School Division of the Ministry of the Chemical Industry of the USSR as a textbook for technical schools of chemical machine building and chemical engineering. The book is also intended for engineers and technicians in chemical plants.

TEXT DATA

Coverage: This work deals with the effect of corrosion and with the methods of its prevention. Basic properties of metals, alloys, metallic protective coatings, etc. and of various non-metallic materials (silicates, ceramics, plastics, rubber, wood and others), used in chemical machinery and apparatus are examined. Suggestions for the

1/2

POLYAKOV, K.A.

SHVIRYAYEV, Grigoriy Konstantinovich; KLIMOV, I.Ya., redaktor;
KISELEV, V.S., redaktor; KLIMOV, I.Ya., redaktor; KRUCHININ,
V.I., redaktor; POLYAKOV, K.A., redaktor; SAGALAYEV, G.V.,
redaktor; AYZENSHTAT, I.I., redaktor; KORNEYEVA, V.I., tekhnicheskiy redaktor

[Electrolytic metal coating for parts and articles for the
chemical industry] Elektroliticheskie metallicheskie pokry-
tiia detalei i izdelii v khimicheskoi promyshlennosti. Pod.
red. I.IA.Klinova, Moskva, Gos.nauchno-tekhn.izd-vo khimi-
cheskoi lit-ry, 1955. 54 p. (Korroziia v khimicheskikh proiz-
vodstvakh i sposoby zashchity, no.2) (MLRA 8:10)

(Electroplating)

POLYAKOV, Konstantin Andreyevich; GURFINKEL', Moisey Aronovich; SAGALAYEV, G.V.
redaktor; AIZENSHTAT, I.I., redaktor; SHPAK, Ye.G., tekhnicheskiiy redaktor

[Corrosion and means of protecting equipment in the sulfuric acid
industry] Korrozia i sposoby zashchity oborudovaniia v sernokislotoi
promyshlennosti. Pod red. G.V.Sagalaeva. Moskva, Gos. nauchno-tekhn.
izd-vo khim. lit-ry, 1956. 214 p. (Korrozia v khimicheskikh proizvod-
stvakh i sposoby zashchity, no.7) (MLRA 9:8)

(Corrosion and anticorrosives)
(Sulfuric acid industry)

Polyakov, K.A.

check Polyakov, K. A., and Gurfinkel, M. A.: Korroziya i sposoby zaschity oborudovaniya v sernokislotoj promyshlennosti (Corrosion and Methods of Protection of the

Equipment in Sulfuric Acid Industry). Moscow: Goskhimizdat. 1956, 214 pp., r. 8 k. 30.

POLYAKOV, K.A.

Separation of amines from gas mixtures. K. A. Polyakov, O. V. Rumyantsev, O. S. Tikhonov, V. A. Zaitsev, and V. A. Nizovskiy. U.S.S.R. Pat. 1,414,000. In the synthesis of NH₃, the latter is adsorbed on solid adsorbents and subsequently desorbed by gradual throttling of the adsorber gases. The hot gases from the synthesis column are passed through the adsorber. M. Hosh

POLYAKOV, K.K.

The ceramic industry should have local raw materials. Stek. 1 ker.
20 no.4:28 Ap '63. (MIRA 16:3)

1. Glavnyy inzhener Ufimskogo otdeleniya Gosudarstvennogo
Vsesoyuznogo instituta proyektirovaniya predpriyatiy promyshlennosti
stroitel'nykh materialov.

(Ceramic materials)

POLYAKOV, K.K.;
BELOV, M.P.; GLOZMAN, M.K.; GORBUSHIN, A.I.; POLYAKOV, K.K.; ROSHCHIN, M.B.;
STOLYARSKIY, L.L.

Practice of mounting ship sections framed to a given size on shipyard
slip. Trudy VNITOSS 6 no.2:117-142 '55. (MLRA 10:5)
(Shipbuilding)

1ST AND 2ND CIPHERS																										3RD AND 4TH CIPHERS																									
PROCEDURES AND PROPERTIES INDEX																																																			
POLYAKOV, K.L. <i>cd</i> The influence of products of metabolism of the muscles on the ability of the neuromuscular apparatus to function. K. L. Polyakov. <i>Trudy Nauch.-Issledovatel. Inst. Fiziol.</i> 9, 309-86 (1938); <i>Chem. Zentr.</i> 1939, II, 3310.—In contrast to the action of perfumes of fatigued muscles, those of resting and working muscles increased the muscular contraction of isolated, fatigued muscle preps. In this case the pH value was without influence on the contraction curves. The effect on the working musculature of the whole organism was not uniform. M. G. Moise																																																			
ASB-516 METALLURGICAL LITERATURE CLASSIFICATION																																																			

POLYAKOV, K. M.

USSR/Engineering—Argon-arc welding

Card 1/1 : Pub. 128—23/33

Authors : Brodskiy, A. Ya., Cand. Tech. Sci.; and Polyakov, K. M., Engineer

Title : Comparison between the argon-arc and oxygen-acetylene methods of welding tubes of aluminum-magnesium alloys

Periodical : Vest. mash. 34/8, 78-80, Aug 1954

Abstract : An account is given of experiments conducted to determine whether argon-arc welding or oxygen-acetylene welding is the more economical when applied to work on tubes of aluminum-magnesium alloy. The former was found to be more productive and to produce better work but to be more expensive. Illustration; tables; graph.

Institution :

Submitted :

POLYAKOV, K.M.

BRODSKIY, A.Ye.; POLYAKOV, K.M.

Effect of argon arc welding fusion defects on the strength of
aluminum-magnesium alloy butt seam welds. Avtom.svar. 8 no.4:
73-83 J1-Ag'55. (MIRA 8:11)
(Aluminum-magnesium alloys--Welding)(Electric welding)

L 4177-66 EWT(m)/EWP(e)/EWP(i)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(e)	
ACC NO: AP5024405D/HR/HR/JG	SOURCE CODE: UR/0286/65/000/015/0083/0083
INVENTOR: Estulin, G. V.; Zimina, L. N.; Kosheleva, G. F.; Topilin, V. V.; Boyarinova, A. P.; Tsvetkova, V. K.; Khatalakh, R. P.; Shnyakin, N. B.; Polyakov, K. M.; Mel'nikov, M. V.; Belyakova, K. A.; Il'in, A. A.; Morozov, B. S.; Bogdanovskiy, B. V.; Khrakovskaya, P. S.	
ORIG: none	
TITLE: Wrought, heat-resistant, nickel-base alloy. Class 40, No. 173418 [announced by Central Scientific Research Institute of Ferrous Metallurgy im. Bardin (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii); z-d "Elektrostal" im. I. P. Tevosyan]	
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 83	
TOPIC TAGS: alloy, nickel alloy, chromium containing alloy, molybdenum containing alloy, tungsten containing alloy, titanium containing alloy, aluminum containing alloy, carbon containing alloy, beryllium containing alloy, cerium containing alloy	
ABSTRACT: This Author Certificate introduces a wrought, heat-resistant, nickel-base alloy with improved mechanical properties and weldability. The alloy contains 17 to 20% chromium, 8-12% molybdenum, 0-6% tungsten, 2-3% titanium, 1-2% aluminum, 0.1% max carbon, 6% max iron, 0.01% max sulfur, 0.015 max phosphorus, 0.5% max manganese, 0.6% max silicon, 0.01% max boron, and 0.02% max cerium. (AZ)	
SUB CODE: MM/ SUMM DATE: 05Feb64/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4/28	
Card 1/1	UDC: 669.245

POLYAKOV, Kirill Petrovich; Prinimal uchastiye EPSHTEYN, B.Yu.;
KHARINSKIY, A.L., retsenzents; ZHUKOV, V.A., red.;
SOBOLEVA, Ye.M., tekhn. red.

[Equipment frameworks of radio-electronic apparatus] Pri-
bornye korpusa radioelektronnoi apparatury. Moskva, Gos-
energoizdat, 1963. 187 p. (MIRA 16:4)
(Radio—Equipment and supplies)
(Electronic apparatus and appliances)

ALEKSANDROV, Viktor Grigor'yevich; POLYAKOV, K.S., red.; SOBOLEVA, Ye.M.,
tekhn. red.

[Problems concerning the design of boilers with medium and
small evaporative capacities] Voprosy proektirovaniia parovykh
kotlov srednei i maloi proizvoditel'nosti. Moskva, Gos. energ.
izd-vo, 1960. 232 p. (MIRA 14:5)

(Boilers)

VASIL'YEV, A.V.; POLYAKOV, K.S., redaktor; ZABRODINA, A.A., tekhnicheskii
redaktor

[Manual for the analysis of fuel gases] Rukovodstvo po analizu
topochnykh gazov. Moskva, Gos. energ. izd-vo, 1954. 123 p.
(Gases--Analysis) (MLRA 7:10)

L 15046-65 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1) Pa-1 AEDC(a)/ASD(f)-2/
AFTC(p) S/0170/64/000/008/0020/0026

ACCESSION NR: AP5001632

AUTHOR: Vaysman, M. D.; Polyakov, K. S.

TITLE: Adiabatic flow of an evaporating liquid

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 8, 1964, 20-26

TOPIC TAGS: adiabatic flow, equilibrium flow, flow density, evaporation, thermodynamic equilibrium, phase equilibrium

Abstract: The experimentally determined flow density of an evaporating liquid in miscellaneous channels considerably exceeds the predicted densities calculated under the assumption of thermodynamic equilibrium flow and flat interface. With large longitudinal pressure gradients, phase equilibrium in the flow is disrupted, and the condensed phase transforms into the superheated state, which is somehow associated with the degree of medium dryness and increase of specific rates. A comparison of the effect of surface forces and the effect of the duration of the process on the flow vapor content and rating characteristics indicates that the time it takes the liquid to pass through the channel is more determinative. From the laws of mass conservation, energy and momentum, it follows that the accumulation of a gaseous phase should proceed uninterruptedly, since

Card 1/2

L 15046-65

ACCESSION NR: AP5001632

thermodynamics does not allow the onset of evaporation jump in an adiabatic flow. The authors present their findings for the purpose of eliciting discussion, rather than as definitive data. Orig. art. has 3 figures and 8 equations.

ASSOCIATION: Politekhicheskiy institut im. M. I. Kalinina, Leningrad (Polytechnic Institute)

SUBMITTED: 17Mar64

ENCL: 00

SUB CODE: ME, TD

NO REF SOV: 005

OTHER: 009

JPRS

Card 2/2

VUL'FSON, B.I.; MIKHALEV, N.N., redaktor; POLYAKOV, K.S., redaktor;
VORONETSKAYA, L.V., tekhnicheskii redaktor

[Power evaluation of heat flow in power plants] Energeticheskaya
otsenka teplovykh potokov v energoustanovkakh. Moskva, Gos. energ.
izd-vo, 1954. 150 p. (MLRA 7:10)
(Electric power plants) (Waste heat)

4ID P - 1327

Subject : USSR/Engineering

Card 1/1 Pub. 110-a -- 9/19

Authors : Zysin, V. A., Zysina-Molozhen, L. M., Kand. of Tech. Sci.,
Polyakov, K. S. and Shapiro, I. G., Engineers

Title : Interferometrical study of a flow around turbine bladings
at trans- and supersonic speed

Periodical : Teploenergetika, 2, 38-42, F 1955

Abstract : The results of interferometrical studies are outlined con-
cerning the flow at trans- and supersonic speed around
turbine bladings at different values of the inflow angle
and of the pitch. Based on experimental data of a two-
dimensional flow some considerations are presented rela-
tive to the most favorable parameters of the bladings
analyzed from the point of view of blade losses. Photos,
charts, 2 Russian references (1953-1954).

Institution : Central Scientific Research Institute of Boilers and
Turbines

Submitted : No date

L 10757-66 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1)

ACC NR: AT6001020

SOURCE CODE: UR/2563/65/000/247/0016/0022

AUTHOR: ⁵⁵ Polyakov, K. S.

ORG: ⁵⁵ Leningrad Polytechnic Institute (Leningrad. Politekhicheskiy institut) ⁴⁹ B+1

TITLE: Nozzle and cylindrical channel calculations at the adiabatic flow of evaporating fluid

SOURCE: Leningrad. Politekhicheskiy institut. Trudy, no. 247, 1965. Turbomashiny (Turbomachines), 16-22

TOPIC TAGS: evaporation, fluid flow, water vapor, adiabatic flow, nozzle flow

ABSTRACT: ^{1,55} The adiabatic flow of an evaporating liquid in nozzles and in circular channels is studied experimentally in the pressure range ^{1,55} 4 to 60 atm-absolute. The specific mass flow rate of the evaporating liquid (water) in converging as well as diverging nozzles is measured. It is found that the flow rate $w\gamma$ increases monotonically in proportion to the lowering of the back pressure. The maximum flow rate is expressed empirically by the expression

$$\left(\frac{w\gamma}{\mu}\right)_{\max} = 0,795 p_1^{0,485}$$

The lowering of the flow density relative to $(w\gamma)_\gamma$ during vapor formation is expressed by

$$\mu_n = 1 - 0,39(1 - \bar{p}_{nn})^{0,63}$$

Cord 1/2

Cord 2/2

POLYAKOV, K. V.

224. Nauchno-Tekhnicheskoe Sostoyaniye i Pokrytiya. Nauchno-Tekhnicheskoe Sostoyaniye po Borbe s Korroziei v Khimicheskoi Promyshlennosti 18-19 Noyabrya 1953g. (Metallic corrosion-resistant materials and coatings)

Scientific and technological conference on combating corrosion in the chemical industry, 18-19 Nov., 1953. A. L. LABUTIN and K. V. POLYAKOV, editors. U.S.S.R., Vsesoyuzhnoe Nauchnoe Issledovaniye Tekhnicheskoe Obshchestvo Rezinovoi i Kautchukovoi Promyshlennosti (VNITO Berlinchikov). Leningrad: Goskhimizdat, 1955, pp. 143. This volume contains the proceedings of a conference convened by Glavkautchuk and the Leningrad section of VNITO, including I. Ya. Klinov on Asbovinil; A. L. Labutin on polyisobutylene-based anti-corrosion materials; G. S. Brodskii on new chemically-resistant plastics and their prospects; N. L. Goldmberg on chemically resistant binders; and N. N. Zolotov on anti-corrosion paints based on Etinol. 38826M2421

2 may

PM

S/196/61/000/009/018/052
E194/E155

AUTHORS: Veselov, A.M., Polyakov, K.V., and Senatorova, I.V.

TITLE: A photo-relay for controlling artificial lighting

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.9, 1961, 18, abstract 9V 153. (Svetotekhnika,
no.2, 1961, 27-28)

TEXT: The article describes a simple photo-relay circuit with the advantages of high sensitivity at low illumination levels (1 - 3 lux). The relay gives a single positive response when the illumination is increased or reduced. The device uses a bridge circuit with a polarising relay and is unaffected by variation of the current in the circuits. Experimental models of the photo-relay were installed to control street lighting in a housing area and on construction sites at the Kuybyshevgidrostroy. During six months service the photo relay was entirely satisfactory. ✓

One figure.

[Abstractor's note: Complete translation.]

Card 1/1

POLYAKOV K.V.

Priroda Kuybyshevskoy Oblasti (Kuybyshev Oblast Natural Science) Redkollegi-
Ya A. G. Nikoforov, K. V. Polyakov (1 Dr. Moskva, Kuybyshevskoye Oblastnoye Gos.
lzd-vo, 1951.
404 P. Illus.

SO: 347N/5
621.33
.N6

1. POLYAKOV, K. V.
2. USSR (600)
4. Aluminum Sulfates - Chapayevsk Region
7. Report on the prospecting work for aluminum sulfate ore in the Chapayevsk region between the town of Chapayevsk and Troitskoye Station. [Abstract] Izv.Glav.upr. geol.fon. No. 2, 1947.
9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

NIKIFOROV, A.G., otvetstvennyy redaktor; POLYAKOV, K.V., professor,
redaktor; ALEKSANDROVA, T.A., dotsent, redaktor; PETROVA, I.I.,
redaktor; BELYANOVA, Ye., redaktor; TEREKHOV, A., redaktor;
VYSHKOVSKIY, D., tekhnicheskij redaktor

[Natural resources of Kuybyshev Province] Priroda Kuibyshevskoi
oblasti. [Kuibyshev] Kuibyshevskoe obl. gos. izd-vo, 1951. 404 p.
(Kuybyshev Province--Geography) (MIRA 9:8)

IVANOV, A.M., dots.; POLYAKOV, K.V., prof.

[Geology of Kuybyshev Province]Geologicheskoe stroenie Kuybyshevskoi oblasti. Kuibyshev, M-vo kul'tury RSFSR, 1960. 81 p.
(MIRA 15:8)

(Kuybyshev Province--Geology)

VESELOV, A.M., inzh.; POLYAKOV, K.V., inzh.; SENATOROVA, I.V., inzh.

Photorelay for controlling electric lighting. Svetotekhnika
7 no.2:27-28 F '61. (MIRA 14:10)

1. Orgenergostroy, g. Kuybyshev.
(Electric lighting) (Electric relays)

KOPELEVICH, I.M.; BALOVNEV, P.F.; MAKUKHIN, M.G.; POLYAKOV, K.Ya.

Use of special tires for logging trucks. Trudy STI 37:135-143
'64. (MIRA 18:5)

POLYAKOV, L.

New directions in the study and use of rare earth metals. Atom.
energ. 15 no.1:84-86 J1 '63. (MIRA 16:8)
(Rare earth metals)

POLYAKOV, L., inzhener.

The PMG-19 fire engines have defects. Pozh.delo 3 no.2:20 F '57.
(MIRA 10:4)

(Fire engines)

POLYAKOV, L.; NOVIKOV, S.

Centralization of accounting and our suggestions. Bukhg. uchët 15
no. 4:47-52 Ap '58. (MIRA 11:5)

1. Starshiy kontroler Ministerstva gosudarstvennogo kontrolya USSR
(for Polyakov). 2. Glavnyy bukhgalter Minskogo oblastnogo finansovogo
otdela (for Novikov).

(Accounting)

OKHOTNIKOV, I.; POLYAKOV, L.

Video magnetic tape recording. Znan.sila 35 no.5:38-39 My
'60.

(MIRA 13:7)

(Television--Equipment and supplies)
(Magnetic recorders and recording)

POLYAKOV, L.

In cooperation with scientific workers. Prom.koop. no.3:39-41 Mr'55.
(MIRA 8:11)

1. Zamestitel' predsedatelya pravleniya Sverdlovskogo gorpromsoвета
(Sverdlovsk--Technical education) (Sverdlovsk--Cooperative
societies)

POLYAKOV, L.

L.S. Kaminskii; on his 70th birthday. Sov.zdrav. 18 no.10:59 '59.

(MIRA 13:2)

(KAMINSKII, LEV SEMENOVICH, 1889-)

POLYAKOV, L.

New roofings for buildings. NTO 2 no.5:28 My '60. (MIRA 14:5)

1. Predsedatel' respublikanskogo pravleniya nauchno-tekhnicheskogo
obshchestva stroitel'noy industrii g. Frunze.
(Frunze--Roofing, Concrete)

POLYAKOV, L.

Right to live. Nauka i zhyttia 12 no.11:43-44 N '62.

(MIRA 16:1)

(Bearing metals)

POLYAKOV, L.

Rose made of steel. Znan, sila 35 no. 12:13 D '60.

(MIRA 13:12)

(Precision casting)

11285-63

EWP(q)/ENT(m)/BDS AFFTC/ASD RDM/JD/EM-2/JG

ACCESSION NR: AP3003989

9/0089/63/015/001/0084/0086

AUTHOR: Polyakov, I.

TITLE: New trends in the investigation and application of rare-earth metals
[Report on a conference on new trends in the investigation and application of rare-earth elements, held in Moscow in March 1963]

SOURCE: Atomnaya energiya, v. 15, no. 1, 1963, 84-86

TOPIC TAGS: rare-earth-metal study, rare-earth-metal application, rare-earth-metal extraction, rare-earth-metal refining, rare-earth-metal phase diagram, rare-earth-metal alloy, rare-earth-metal magnetic moment, rare-earth-metal refractory compound, rare-earth-metal vanadium alloying, rare-earth-metal steel alloying, rare-earth-metal nickel-alloy alloying

ABSTRACT: A conference on new trends in the investigation and application of rare-earth elements was held in Moscow at the Institut metallurgii im. A. A. Baykova (Institute of Metallurgy) in March, 1963. The reports presented dealt with the recovery and refining of rare-earth metals, phase diagrams, investigation of electric, magnetic, and semiconductor properties, the study of crystal structures, and the use of rare-earth metals in the metallurgical industry.

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L 11285-63

ACCESSION NR: AP3003989

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[Abstracter's note: the titles of reports and their authors are not given in the review. Instead, the review consists of isolated statements made without regard to particular research projects or investigators. The following is a list of some of the more interesting of these statements:] 1) The magnitude of the mean atomic magnetic moment and of the paramagnetic Curie point has been established for all rare-earth metals and alloys investigated at temperatures ranging from 77 to 1400C. 2) It has been found that alloys of the RCo_x and RFe_x type are ferromagnetic. 3) The rare-earth metals form refractory compounds with boron, carbon, nitrogen, silicon, selenium, and phosphorus. 4) The ScB_2 refractory compound has a tetragonal structure, high resistivity, low thermal expansion, and high hardness. 5) Gadolinium selenides and lanthanum semiselenides have been found to be semiconductors. 6) The addition of cerium to vanadium makes it possible to roll vanadium with a 95-99% reduction without process annealing. 7) Welds made with the 20GSYT alloy electrode, containing 0.3-1.5% ferrocium or cerium and lanthanum, are 1.5 to 2 times stronger than the parent metal. 8) A 0.05-0.18% addition of rare metals or a 0.08-0.12% addition of rare-metal oxides improve technological properties, surface quality, corrosion resistance, and hot ductility of Kh18Ni2M2T and Kh18Ni9Ti stainless steels. 9) The alloying of the KhN7(TYu) nickel-base alloy with Ce, La, Pr, Nd, Sm, or mismetal [50% Ce,

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27

1. 14285-63

ACCESSION NR: AP3003989

25% La, and 25% other rare-earth metals] improves the rupture strength and creep resistance of the alloy at 700C. 10) A 0.07% addition of La, Ce, Nd, or mish-metal doubles the service life of the KhN77TYu alloy under conditions of thermal cycling at 1200C. At the same time, the oxygen content of the alloy is lowered to one-half to one-sixth of its initial value, the inner grain structure is changed, and the diffusion is intensified. 11) A 0.05-0.3% addition of Ce, La, and Nd reduces the grain size in heat-treated iron, cobalt, and nickel, and improves the mechanical and, in certain cases, electric and magnetic properties of these metals. 12) A 0.1% addition of ferrocerium to 30KhGSA, 18KhNVA, and 12Kh2N4A steels refines their structure, improves mechanical properties, and reduces the sulfur content. 13) In experimental heats of the 34KhN1M and 40KhGS steels an addition of ferrocerium of 0.7-1.5 kg/ton improves ingot macrostructure and decreases sulfur segregation. 14) A 0.7-0.85% addition of rare-earth elements improves the ductility and notch toughness of 34KhN1MA steel. The conference recommended the wider use of rare-earth elements in research and industry.

ASSOCIATION: none
SUBMITTED: 00
SUB CODE: ML

DATE ACQ: 08Aug63
NO REF SOV: 000

ENCL: 00
OTHER: 000

Card 3/3

POLYAKOV, L.

On the road of research. Izobr. 1 rats. no.8:24-25 Ag '59.
(MIRA 13:1)

(Efficiency, Industrial)

POLYAKOV, Lazar' Grigor'yevich; PESTRYAKOV, A.I., redaktor; BALLOD, A.I.,
tekhnicheskiiy redaktor

[Harvesting corn] Uborka kukuruzy, Moskva, Gos. izd-vo selkhoz. lit-ry
1956. 78 p. (MLRA 9:10)
(Corn (Maize)--Harvesting)

POLYAKOV, Lazar' Grigor'yevich, kandidat tekhnicheskikh nauk; YELENEV, A.V.,
inzhener, redaktor; KATSNEL'SON, S.M., redaktor izdatel'stva;
FURMAN, G.V., tekhnicheskii redaktor

[Mechanization of corn harvesting] Mekhanizatsiia uborki kukuruzy.
Moskva, Izd-vo "Znanie," 1956. 30 p. (Vsesoluznoe obshchestvo po
rasprostraneniю politicheskikh i nauchnykh znanii. Ser.5, no.19)
(Harvesting machinery)
(Corn (Maize)--Harvesting)

POLYAKOV, L.I. (Voronezh); POLYAKOV, Yu.T. (Voronezh); RUDIS, M.A. (Voronezh)

Carrying capacity of a two-layer circular plate. Izv.AN SSSR.Otd.tekh.
nauk.Mekh.i mashinostr. no.6:163-165 N-D '62. (MIRA 15:12)
(Elastic plates and shells)

44639

S/179/62/000/006/022/022
E199/E442

10.6100
AUTHORS: Polyakov, L.I., Polyakov, Yu.T., Rudis, M.A.
(Voronezh)

TITLE: The bearing capacity of a two-layer plate

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye
tekhnicheskikh nauk. Mekhanika i mashinostroyeniye,
no.6, 1962, 163-165

TEXT: The plate under consideration consists of two layers of material with respective thicknesses h_1 and h_2 , separated by a distance δ . The materials are connected by rigid point connections which do not cause any forces in the plane of the plate. The two layers have different yield values σ_1 and σ_2 ; the materials are assumed to be rigid-plastic and to be subject to the Tresca yield condition. The plate is loaded with a uniform pressure and the problem is to find the limiting pressure at which the plate begins to distort. A formula is quoted for this pressure on a plate with freely supported edges. A plate containing holes distributed in concentric circles is also considered and, using an energy method, formulae are derived for the limiting
Card 1/2

The bearing capacity ...

S/179/62/000/006/022/022
E199/E442

pressure for the following conditions: (a) when the load acts over the entire plate and (b) when it acts over the solid area only. When the plate has built-in edges, it is divided into two regions determined from the condition that the radial bending moment is zero at the boundary of the two regions; the formula for bearing capacity is derived on this assumption. There is 1 figure. f

SUBMITTED: April 19, 1962

Card 2/2

BROYDO, N.F.; POLYAKOV, L.K., inzh., retsenzents; KALAKUTSKIY, V.Ye.,
inzh., red.; MITARCHUK, G.A., red.izd-va; SHCHETININA,
L.V., tekhn. red.; PETERSON, M.M., tekhn. red.

[Devices of a unified pneumatic control system in automatic
control circuits] Pribory pnevmaticheskoi unifitsirovannoi
sistemy v skhemakh avtomatizatsii. Moskva, Mashgiz, 1963.
142 p. (MIRA 16:10)

(Pneumatic control--Equipment and supplies)

VANCHAKOV, V.M.; DOBROVOL'SKIY, P.P.; POLYAKOV, L.K.

Cylindrical vibrator screen (knotter). Bumagodel. mash. no. 8:26-39
'60. (MIRA 14:3)
(Papermaking machinery)

POLYAKOV, L.K.; LIKHTER, A.D.; AFONCHIKOV, N.A.

Automation of rotor setting in conical mills. Bumagodel. mash.
no.8:52-65 '60. (MIRA 14:3)

(Papermaking machinery)

ZIGBERMAN, D.I.; POLYAKOV, L.K.

New electric circuit of a balancing machine. Dumagodel. mash.
no.8:164-167 '60. (MIRA 14:3)
(Balancing of machinery)

POLYAKOV, L.K.

Remote control level indicator of the pulp mass. Bumagodel.mash.
no.7:64-80 '59. (MIRA 13:5)

(Telemetering) (Liquid level indicators)

SKVORTSOV, S.G., inzh.; BYKOVSKIY, G.P., inzh.; VASINA, I.N., inzh.; VORONIN, A.D., inzh.; GEL'BSHTAYN, I.V., inzh.; POLYAKOV, L.L., inzh.; GRENCHUSHNIKOV, G.A., inzh., red.

[Catalog of designs of stands, construction yards, equipment and devices for making prestressed reinforced concrete elements.]
Al'bom-katalog proektov stendov i poligonov, oborudovaniia i prispособlenii dlia izgotovleniia predvaritel'no napriazhennykh zhelezobetonnykh konstrukttsii. Moskva, TSentr. biuro tekhn. inform. No. KZh-2. 1957. 118 p. (MIRA 11:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut tekhnicheskoy pomoshchi stroitel'stvu.
(Prestressed concrete)

POLYAKOV, L.M.

Category : USSR/Solid State Physics - Diffusion. Sintering

E-6

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1260

Author : Garber, R.I., Polyakov, L.M., Mikhaylovskiy, V.M.

Title : Investigation of Processes in Roasting of Copper

Orig Pub : Ukr. fiz. zh., 1956, 1, No 1, 88-97

Abstract : The tearing strength of a junction of copper rings, formed at various compressions and roasting temperatures, was studied at room temperature. The roasting was done in vacuum (10^{-5} mm mercury). The strength of the joint is proportional to the compression, and the proportionality coefficient increases with temperature. The dependence of the logarithm of the strength of the joint plotted vs. the reciprocal of the roasting temperature is a straight line, the slope of which can be used to determine the activation energy of the roasting process. The latter is 27.6 kcal/g-atom at a pressure of 0.7 kg/mm^2 , and decreases with increasing compression. The growth of the crystal grain does not influence the strength of the joint, which depends on the true contact area. Diffusion processes of surface displacement of atoms contribute to an increased joint strength. The reduced activation energy resulting from the increased pressure is attributed to the influence of the

Card : 1/2

POLYAKOV, L. M.

21/8 The production of ultramicroscopic nonuniformities during the plastic deformation of rock salt. R. I. Garber, I. V. Obreimov, and L. M. Polyakov (Phys. Tech. Inst., Acad. Sci. Ukr. S.S.R., Kharkov). *Doklady Akad. Nauk S.S.S.R.* 108: 425-6(1956); cf. Obreimov and Shubnikov, *C.A.* 21, 2205; Garber, *C.A.* 33, 5254¹). Natural rock salt crystals were split along the natural cleavage planes into small prisms of various sizes, which were tested for an absence of flaws, then heated for 30 hrs. at 650° and cooled in the furnace. When cooled in the air, characteristic thermal stresses were produced and the slip bands were connected with the stresses. Light dispersion, similar to the dispersion caused by elongation and compression, is observed in this case. The calcined samples were tested in an app. permitting simultaneous measurements of stress deformation and of light dispersion. Ordinarily, the slip bands are first observed at low stresses. Increasing the stresses produces a weak dispersion, and a gradual formation of a luminous cone, and finally a bright uniform glow of the whole light cone inside the crystal. The observations made justified the statement that the deformations produced ultramicroscopic nonuniformities, as well as slip bands as a result of local shears or ruptures, and the plastic flow can in the latter case be described as a series of local ruptures.

W. M. Sternberg

3

POLYMER

GARDNER, R.I.; KOGAN, V.S.; POLYAKOV, L.M.

Pore sealing in polygonized rock salt. Fiz. met. i metalloved. 4
no.1:89-93 '57. (MLRA 10:6)

1. Fiziko-tekhnicheskiy institut Akademii nauk USSR.
(Rock salt) (Metallography)

POLYMER
GARBER, R. I., GINDIN, I. R. and POLYAKOV, L. M.

"Fractioning and Sintering of Microblocks during the Plastical
Deformation of Crystals."

paper presented at the Conf. on Mechanical Properties of Non-Metallic Solids,
Leningrad, USSR, 19-26 May 58.

Physical-Technical Institute of the Ukraianian Academy of Sciences, Kharkov.

SOV/126-6-5-29/43

AUTHORS: Garber, R. I., Kogan, V. S., and Polyakov, L. M.

TITLE: Dislocations or Pores? (Dislokatsii ili pory?)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 5, pp 934-935 (USSR)

ABSTRACT: Hirsch et al. (Ref 1) reported direct observation of dislocations which appear in aluminium foils rolled down or otherwise reduced to 0.5μ thickness, annealed in vacuum and etched in a dilute hydrofluoric acid solution. These dislocations were observed by means of an electron microscope. The present authors suggest that the electron micrographs given by Hirsch et al. may also be interpreted as assemblies of micropores at boundaries of blocks of polygonized aluminium. Such micropores were observed by the present authors (Ref 2) in their studies of polygonization of rock-salt. Comparison of optical micrographs of polygonized rock-salt with electron micrographs of aluminium films (Fig 2, taken from Ref 1) shows that they are very similar. In both cases the mutual orientation of adjacent blocks is almost the same

Card1/3 (1-2⁰) and the distances between defects distributed

Dislocations or Pores?

SOV/126-6-5-29/43

along block boundaries differ by three orders of magnitude, simply because of the difference between the magnification in the two cases (400X optical, 100 000X electron-microscopic). In photographs reproduced by Hirsch et al. there are lines, marks, spots, etc. inside polygonized blocks. These are ascribed to dislocation lines and traces. The present authors point out that such marks, lines etc. may also be due to non-uniformities which are produced inside polygonized blocks by deformation. Annealing by the electron microscope beam produces grouping of vacancies along such non-uniformities and some of such groupings may migrate to the block surfaces. The authors conclude, therefore, that the results of Hirsch et al. cannot be taken as a proof of the presence of dislocations in their aluminium samples. In contrast to Hirsch et al. (Ref 1), Heidenreich (Ref 4) did not observe any dislocations or pores in aluminium foils produced by rolling and electrolytic etching with intermediate annealing. This may be due to insufficient saturation with vacancies of such foils, because Hirsch et al. reduced the thickness of their

Card2/3

Dislocations or Pores?

SOV/126-5-5-29/43

samples to 0.5 μ , while Heidenreich's samples were of 125 μ thickness.

There are 2 figures and 4 references, 2 of which are Soviet and 2 English.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR
(Physico-Technical Institute, Ac.Sc., USSR)

SUBMITTED: August 26, 1957

Card 3/3

POLYAKOV, L. M., R. I. GARBER and I. A. GINDIN

"The Characterization of Plastic Deformations by Means of the Micro-Fissures Occurring."

report presented at the Conference on Investigation of Mechanical Properties of Non-Metals, by the Intl. Society of Pure and Applied Physics and the AS USSR, at Leningrad, 19-24 May 1958.
(Vest, Ak Nauk SSSR, 1958, no. 9, pp. 109-111)